

## **I. AMENDMENT**

### **In the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application.

1. (previously presented) A method for communicating data, comprising the steps of receiving a request from a source device to access a network of devices, said network of devices includes a first set of devices, which said source device is authorized to access, and which have been authenticated based on an associated identifier, and a second set of devices, which said source device is not authorized to access, said first set of devices being distributed across a global network;

determining that said source device is authorized to access first set of devices based on a correspondence between an identifier of said source device and said associated identifier; and

responsive to said determining step, allowing communication between said source device and said first set of devices, and not allowing communication between said source device and said second set of devices.

2. (previously presented) A method according to claim 1, wherein:  
said identifier associated with said source device comprises a first user identification;

said first set of devices use said first user identification; and

said second set of devices do not use said first user identification.

3. (previously presented) A method according to claim 2, further comprising the step of:

authenticating said first source device based on said first user identification and a first password, said step of allowing is performed in response to said step of authenticating.

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4. (previously presented) A method according to claim 1, wherein said step of allowing communication includes the steps of:

transmitting a search request to said first set of devices;

performing searches at said first set of devices based on said search request;

and

providing results from said searches.

5. (previously presented) A method according to claim 1, wherein said step of allowing communication includes the steps of:

receiving, at an intermediate entity, and from said source device, a request to search;

forwarding said request to search from said intermediate entity to said first set of devices;

performing searches at said first set of devices based on said request to search;

attempting to provide results from said searches directly to said source device from said first set of devices via direct connections which bypass said intermediate entity; and

providing said results from said searches to said source device from said first set of devices via said intermediate entity if said direct connections cannot be established, said intermediate entity performs said step of receiving a request to access a network of devices.

6. (previously presented) A method according to claim 1, wherein said step of allowing communication includes the steps of:

transmitting a search request from said source device to a target device, which belongs to said first set of devices;

performing a search at said target device based on said search request; and

providing results from said search from said target device to said source device via a connection between said source device and said target device, said source device is in a

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private network, said source device has a private address and does not have a globally unique address, said target device has a globally unique address and is inaccessible via an Internet.

7. (previously presented) A method according to claim 1, wherein said step of allowing communication includes the steps of:

transmitting a search request from said source device to a target device which belongs to said first set of devices;

performing a search at said target device based on said search request; and

providing results from said search from said target device to said source device via a connection between said source device and said target device, said source device is behind a firewall.

8. (previously presented) A method according to claim 1, wherein said step of allowing communication includes the steps of:

attempting to establish a first connection from said source device to a target device;

transferring an item using said first connection if said attempt to establish said first connection was successful;

sending a message to said target via an intermediate device if said attempt to establish said first connection was not successful;

attempting to establish a second connection from said target device to said source device;

transferring said item using said second connection if said attempt to establish said second connection was successful; and

transferring said item via a proxy if said attempt to establish said second connection was not successful.

9. (original) A method according to claim 1, wherein:

said step of allowing communication includes transferring items, streaming items, searching for items, and viewing a list of items.

10. (previously presented) A method according to claim 1, wherein:

said step of allowing communication includes sending a command from said a source device to one or more devices of said first set of devices.

11. (previously presented) A method according to claim 1, wherein:

said step of allowing communication includes sending a command from said a source device to an intermediate server and forwarding said command from said intermediate server to one or more devices of said first set of devices.

12. (previously presented) A method according to claim 1, wherein said step of allowing communication includes the steps of:

creating a playlist; and

adding items to said playlist, said items include a first item from a first device and a second item from a second device, said first device and said second device are not on a common LAN.

13. (original) A method according to claim 1, further comprising the step of: establishing said network of devices without using a server.

14. (original) A method according to claim 13, wherein said step of establishing includes the steps of:

broadcasting from a first device;

listening for other devices, performed by said first device;

broadcasting from a second device;

listening for other devices, performed by said second device;

establishing a connection between said second device and said first device;

authenticating said first device and said second device;

broadcasting from a third device;

listening for other devices, performed by said third device;

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establishing a connection between said second device and said third device;  
authenticating said second device and said third device;  
establishing a connection between said third device and said first device; and  
authenticating said first device and said third device.

15. (previously presented) A method for communicating data, comprising the steps of:

receiving a request from a source device to access a network of devices, said network of devices includes a first set of devices, which said source device is authorized to access, and which have been authenticated based on an associated identifier, and a second set of devices, which said source device is not authorized to access;

determining that said source device is authorized to access said first set of devices based on a correspondence between an identifier of said source device and said associated identifier;

responsive to said determining step, identifying items on said first set of devices; and

responsive to said step of identifying said items, creating a playlist of said items on said first set of devices, said playlist includes items on different devices.

16. (previously presented) A method according to claim 15, wherein:  
said creating a playlist comprises creating a playlist of items on different types of devices.

17. (previously presented) A method according to claim 15, wherein said step of identifying items includes the steps of:

receiving a request at an intermediate entity from said a source device to search;

forwarding said request to search from said intermediate entity to said first set of devices;

performing searches at said first set of devices based on said search request;

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attempting to provide results from said searches directly to said source device from said first set of devices via direct connections which bypass said intermediate entity; and

providing said results from said searches to said source device from said first set of devices via said intermediate entity if said direct connections cannot be established.

18. (previously presented) A method of communicating data, comprising the steps of:

logging a first device into a network of devices using a first user identification, said network of devices includes devices logged into said network using said first user identification and devices logged in to said network using one or more other user identifications, said one or more other user identifications include a second user identification;

identifying said devices that are logged in to said network using said first user identification; and

responsive to said step of identifying allowing said first device to communicate with said devices that are logged into said network using said first user identifications and not allowing said first device to communicate with said devices that are logged in to said network using said second user identification.

19. (previously presented) A method according to claim 18, wherein said step of allowing said first device to communicate includes the steps of:

receiving a request at an intermediate entity from a requesting device to search, said requesting device is logged into said network using said first user identification;

forwarding said request to search from said intermediate entity to said devices that are logged in to said network using said first user identification;

performing searches at said devices that are logged in to said network using said first user identification based on said request;

attempting to provide results from said searches directly to said requesting device from said devices that are logged in to said network using said first user identification via direct connections which bypass said intermediate entity; and

providing said results from said searches to said first device from said devices that are logged in to said network using said first user identification via said intermediate entity if said direct connections cannot be established.

20. (previously presented) A method according to claim 18, wherein said step of allowing said first device to communicate includes the steps of:

attempting to establish a first connection from said first device to a target device;

transferring an item using said first connection if said attempt to establish said first connection was successful;

sending a message to said target via an intermediate device if said attempt to establish said first connection was not successful, said intermediate entity performs said step of receiving a request to access a network;

attempting to establish a second connection from said target device to said first device;

transferring said item using said second connection if said attempt to establish said second connection was successful; and

transferring said item via a proxy if said attempt to establish said second connection was not successful.

21. (previously presented) A method according to claim 18, wherein:

said step of allowing said first device to communicate includes sending a command from said first device to an intermediate server; and

forwarding said command from said intermediate server to one or more of said devices that are logged in to said network using said first user identification.

22. (previously presented) A method according to claim 18, wherein said step of allowing said first device to communicate includes the steps of creating a playlist; and

adding items to said playlist, said items include a first item from said first device and a second item from a second device, said first device and said second device are

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not on a common LAN, said second device is logged in to said network using said first user identification.

23. (previously presented) A method of communicating data, comprising the steps of:

receiving a search request from a source device;

identifying a first set of devices, in a network of devices, wherein the source device is authorized to access the first set of devices, and the first set of devices have been authenticated based on an associated identifier, and wherein said identifying is based on a correspondence between an identifier of said source device and said associated identifier;

responsive to the identifying step, accessing the a first set of devices, said network of devices also includes a second set of devices which said source device is not authorized to access;

sending the a search request to said first set of devices; and

receiving search results from said first set of devices.

24. (previously presented) A method according to claim 23, wherein:  
said step of sending includes sending said search request to a server for forwarding to said first set of devices; and

said step of receiving search results includes receiving said search results at said source device via direct connections, if direct connections between said source device and said first set of devices, which bypass the server, can be established;

wherein an attempt is made to establish said direct connections; and

said step of receiving search results includes receiving said search results at said source device via said server, if said direct connections cannot be established.

25. (cancelled)

26. (previously presented) A method for communicating data, comprising the steps of:

receiving, from a requesting device, a request to transfer an items residing on a target device;



attempting to establish a first connection, between said requesting device and said target device, in response to said step of receiving;

transferring said item from said target device to said requesting device using said first connection if said attempt to establish said first connection was successful;

sending a message to said target device via an intermediate device if said attempt to establish said first connection was not successful;

receiving an attempt to establish a second connection, between said requesting device and said target device via a proxy, if said attempt to establish said first connection was not successful; and

transferring said item using said second connection if said attempt to establish said second connection was successful.

27. (cancelled)

28. (previously presented) One or more processor readable storage devices for storing processor readable code, said processor readable code for programming one or more processors to perform a method comprising the steps of:

receiving a request from a source device to access a network of devices, said network of devices includes a first set of devices, which said source device is authorized to access, and which have been authenticated based on an associated identifier, and a second set of devices, which said source device is not authorized to access, said first set of devices being distributed across a global network;

determining that said source device is authorized to access said first set of devices based on a correspondence between an identifier of said source device and said associated; and

responsive to said determining step, allowing communication between said source device and with said first set of devices, and not allowing communication between said source device and said second set of devices.

29. (previously presented) One or more processor readable storage devices according to claim 28, wherein:

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said identifier associated with said source device comprises said a first user identification;

said first set of devices use said first user identification; and

said second set of devices do not use said first user identification.

30. (previously presented) One or more processor readable storage devices according to claim 28, wherein said step of allowing communication includes the steps of: receiving, at an intermediate entity, and from said source device, a request to search;

forwarding said request to search from said intermediate entity to said first set of devices;

performing searches at said first set of devices based on said request to search;

attempting to provide results from said searches directly to said source device from said first set of devices via direct connections which bypass said intermediate entity; and

providing said results from said searches to said source device from said first set of devices via said intermediate entity if said direct connections cannot be established.

31. (previously presented) One or more processor readable storage devices according to claim 28, wherein said step of allowing communication includes the steps of:

attempting to establish a first connection from said a source device to a target device;

transferring an item using said first connection if said attempt to establish said first connection was successful;

sending a message to said target device via an intermediate device if said attempt to establish said first connection was not successful, said intermediate entity performs said step of receiving a request to access a network;

attempting to establish a second connection from said target device to said source device;

transferring said item using said second connection if said attempt to establish said second connection was successful; and

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transferring said item via a proxy if said attempt to establish said second connection was not successful.

32. (previously presented) One or more processor readable storage devices according to claim 28, wherein:

said step of allowing communication includes sending a command from said a source device to an intermediate server and forwarding said command from said intermediate server to one or more devices of said first set of devices.

33. (previously presented) One or more processor readable storage devices according to claim 28, wherein said step of allowing communication includes the steps of:

creating a playlist; and

adding items to said playlist, said items include a first item from a first device and a second item from a second device, said first device and said second device are not on a common LAN.

34. (previously presented) One or more processor readable storage devices for storing processor readable code, said processor readable code for programming one or more processors to perform a method comprising the steps of:

receiving a request from a source device to access a network of devices, said network of devices includes a first set of devices, which said source device is authorized to access, and which have been authenticated based on an associated identifier, and a second set of devices, which said source device is not authorized to access;

determining that said source device is authorized to access said first set of devices based on a correspondence between an identifier of said source device and said associated identifier;

responsive to said determining step, identifying items on said first set of devices; and

responsive to said step of identifying said items, creating a playlist of said items on said first set of devices, said playlist includes items on different devices.

35. (previously presented) One or more processor readable storage devices according to claim 34, wherein:

said creating a playlist comprises creating a playlist of items on different types of devices.

36. (previously presented) One or more processor readable storage devices according to claim 34, wherein said step of identifying items includes the steps of:

receiving a request at an intermediate entity from said a source device to search;

forwarding said request to search from said intermediate entity to said first set of devices;

performing searches at said first set of devices based on said search request;

attempting to provide results from said searches directly to said source device from said first set of devices via direct connections which bypass said intermediate entity; and

providing said results from said searches to said source device from said first set of devices via said intermediate entity if said direct connections cannot be established, said intermediate entity performs said step of receiving a request to access a network of devices.

37. (previously presented) One or more processor readable storage devices for storing processor readable code, said processor readable code for programming one or more processors to perform a method comprising the steps of:

logging a first device into a network of devices using a first user identification, said network of devices includes devices logged into said network using said first user identification and devices logged in to said network using one or more other user identifications, said one or more other user identifications include a second user identification;

identifying said devices that are logged in to said network using said first user identification; and

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responsive to said step of identifying, allowing said first device to communicate with said devices that are logged into said network using said first user identification and not allowing said first device to communicate with said devices that are logged in to said network using said second user identification.

38. (previously presented) One or more processor readable storage devices according to claim 37, wherein said step of allowing said first device to communicate includes the steps of:

- receiving a request at an intermediate entity from said first device to search;
- forwarding said request to search from said intermediate entity to said devices that are logged in to said network using said first user identification;
- performing searches at said devices that are logged in to said network using said first user identification based on said request to search;
- attempting to provide results from said searches directly to said first device from said devices that are logged in to said network using said first user identification via direct connections which bypass said intermediate entity; and
- providing said results from said searches to said first device from said devices that are logged in to said network using said first user identification via said intermediate entity if said direct connections cannot be established.

39. (previously presented) One or more processor readable storage devices according to claim 37, wherein said step of allowing said first device to communicate includes the steps of:

- attempting to establish a first connection, from said first device to a target device;
- transferring an item using said first connection if said attempt to establish said first connection was successful;
- sending a message to said target via an intermediate device if said attempt to establish said first connection was not successful, said intermediate device said step of receiving a request to access a network;

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attempting to establish a second connection from said target device to said source device;

transferring said item using said second connection if said attempt to establish said second connection was successful; and

transferring said item via a proxy if said attempt to establish said second connection was not successful.

40. (previously presented) One or more processor readable storage devices according to claim 37, wherein:

said step of allowing said first device to communicate includes sending a command from said first device to an intermediate server and forwarding said command from said intermediate server to one or more of said devices that are logged in to said network using said first user identification.

41. (previously presented) One or more processor readable storage devices according to claim 37, wherein said step of allowing said first device to communicate includes the steps of:

creating a playlist; and

adding items to said playlist, said items include a first item from said first device and a second item from a second device, said first device and said second device are not on a common LAN, said second device is logged in to said network using said first user identification.

42. (previously presented) One or more processor readable storage devices for storing processor readable code, said processor readable code for programming one or more processors to perform a method comprising the steps of:

receiving a search request from a source device;

identifying a first set of devices, in a network of devices, wherein the source device is authorized to access the first set of devices, and the first set of devices have been authenticated based on an associated identifier, and wherein said identifying is based on a correspondence between an identifier of said source device and said associated identifier;

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responsive to a identifying step, accessing the first set of devices, said network of devices also includes a second set of devices which said source device is not authorized to access;

sending the search request to said first set of devices; and  
 receiving search results from said first set of devices.

43. (previously presented) One or more processor readable storage devices according to claim 42, wherein:

said step of sending includes sending said search request to a server for forwarding to said first set of devices; and

said step of receiving search results includes receiving said search results at said source device via direct connections, if direct connections between said source device and said first set of devices, which bypass the server, can be established;

wherein an attempt is made to establish said direct connections; and

said step of receiving search results includes receiving said search results at said source device via said server, if said direct connections cannot be established.

44. (cancelled)

45. (previously presented) One or more processor readable storage devices for storing processor readable code, said processor readable code for programming one or more processors to perform a method comprising the steps of:

receiving, from a requesting device, a request to transfer an items residing on a target device;

attempting to establish a first connection, between said requesting device and said target device, in response to said step of receiving;

transferring said item from said target device to said requesting device using said first connection if said attempt to establish said first connection was successful;

sending a message to said target device via an intermediate device if said attempt to establish said first connection was not successful;

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receiving an attempt to establish a second connection, between said requesting device and said target device via a proxy, if said attempt to establish said first connection was not successful; and

transferring said item using said second connection if said attempt to establish said second connection was successful.

46. (cancelled)

47. (previously presented) An apparatus for communicating data, comprising:  
a communication interface; and

one or more processors, in communication with said communication interface, said one or more processors perform a method comprising the steps of:

receiving a request from a source device to access a network of devices, said network of devices includes a first set of devices, which said source device is authorized to access, and which have been authenticated based on an associated identifier, and a second set of devices, which said source device is not authorized to access, said first set of devices being distributed across a global network,

determining that said source device is authorized to access identifying said first set of devices based on a correspondence between an identifier of said source device and said associated identifier; and

responsive to said determining step, allowing communication between said source device and said first set of devices, and not allowing communication between said source device and said second set of devices.

48. (previously presented) An apparatus according to claim 47, wherein:  
said identifier associated with said source device comprises a first user identification;

said first set of devices use said first user identification; and

said second set of devices do not use said first user identification.

49. (previously presented) An apparatus according to claim 47, wherein said step of allowing communication includes the steps of:



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receiving, at an intermediate entity, and from said source device, a request to search;

forwarding said request to search from said intermediate entity to said first set of devices;

performing searches at said first set of devices based on said request to search;

attempting to provide results from said searches directly to said source device from said first set of devices via direct connections which bypass said intermediate entity;

and

providing said results from said searches to said source device from said first set of devices via said intermediate entity if said direct connections cannot be established, said intermediate entity performs said step of receiving a request to access a network of devices.

50. (previously presented) An apparatus according to claim 47, wherein said step of allowing communication includes the steps of:

attempting to establish a first connection from said a source device to a target device;

transferring an item using said first connection if said attempt to establish said first connection was successful;

sending a message to said target device via an intermediate device if said attempt to establish said first connection was not successful, said intermediate entity performs said step of receiving a request to access a network;

attempting to establish a second connection from said target device to said source device;

transferring said item using said second connection if said attempt to establish said second connection was successful; and

transferring said item via a proxy if said attempt to establish said second connection was not successful.

51. (previously presented) An apparatus according to claim 47, wherein:

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said step of allowing communication includes sending a command from said a source device to an intermediate server and forwarding said command from said intermediate server to one or more devices of said first set of devices.

52. (previously presented) An apparatus according to claim 47; wherein said step of allowing communication includes the steps of:

creating a playlist; and

adding items to said playlist, said items include a first item from a first device and a second item from a second device, said first device and said second device are not on a common LAN.

53. (previously presented) An apparatus for communicating data, comprising:

a communication interface; and

one or more processors in communication with said communication interface, said one or more processor perform a method comprising the steps of:

logging a first device into a network of devices using a first user identification, said network of devices includes devices logged into said network using said first user identification and devices logged in to said network using one or more other user identifications, said one or more other user identifications include a second user identification,

identifying said devices that are logged in to said network using said first user identification, and

responsive to said step of identifying, allowing said first device to communicate with said devices that are logged into said network using said first user identification, and not allowing said first device to communicate with said devices that are logged into said network using said second user identification.

54. (previously presented) An apparatus according to claim 53, wherein said step of allowing said first device to communicate includes the steps of:

receiving a request from said first device at an intermediate entity to search;

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forwarding said request to search from said intermediate entity to said devices that are logged in to said network using said first user identification;

performing searches at said devices that are logged in to said network using said first user identification based on said request;

attempting to provide results from said searches directly to said first device from said devices that are logged in to said network using said first user identification via direct connections which bypass said intermediate entity; and

providing said results from said searches to said first device from said devices that are logged in to said network using said first user identification via said intermediate entity if said direct connections cannot be established.

55. (previously presented) An apparatus according to claim 53, wherein said step of allowing said first device to communicate includes the steps of:

attempting to establish a first connection from said first device to a target device;

transferring an item using said first connection if said attempt to establish said first connection was successful;

sending a message to said target device via an intermediate device if said attempt to establish said first connection was not successful, said intermediate entity performs said step of receiving a request to access a network;

attempting to establish a second connection from said target device to said source device;

transferring said item using said second connection if said attempt to establish said second connection was successful; and

transferring said item via a proxy if said attempt to establish said second connection was not successful.

56. (previously presented) An apparatus according to claim 53, wherein:  
said step of allowing said first device to communicate includes sending a command from said first device to an intermediate server and forwarding said command

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from said intermediate server to one or more of said devices that are logged in to said network using said first user identification.

57. (previously presented) An apparatus according to claim 53, wherein said step of allowing said first device to communicate includes the steps of:

creating a playlist; and

adding items to said playlist, said items include a first item from said first device and a second item from a second device, said first device and said second device are not on a common LAN, said second device is logged in to said network using said first user identification.